

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A differential amplifier circuit comprising:

a first differential amplifier for receiving a pair of differential input signals to generate a first output;

a second differential amplifier for receiving said pair of differential input signals to generate a second output; and

a summing circuit for summing said first output of said first differential amplifier and said second output of said second differential amplifier to provide a common output for said differential amplifier circuit; and

a reference voltage generation circuit for providing a reference voltage signal to said summing circuit, wherein said reference voltage generation circuit is a differential amplifier.

2. (original) The differential amplifier circuit of Claim 1, wherein said first differential amplifier is an n-channel differential amplifier.

3. (original) The differential amplifier circuit of Claim 2, wherein said first differential amplifier includes a pair of n-channel transistors for receiving said pair of differential input signals, respectively.

4. (original) The differential amplifier circuit of Claim 1, wherein said second differential amplifier is a p-channel differential amplifier.

1 5. (original) The differential amplifier circuit of Claim 1, wherein said second differential
2 amplifier includes a pair of p-channel transistors for receiving said pair of differential input
3 signals, respectively.

1 6. (original) The differential amplifier circuit of Claim 1, wherein said summing circuit is
2 an n-channel differential amplifier.

1 7. (currently amended) The differential amplifier circuit of Claim 6 1, wherein said summing
2 circuit includes an pair of n-channel transistors for receiving pair, wherein a first transistor of said
3 n-channel transistor pair receives said voltage reference signal from said reference voltage
4 generation circuit, wherein a second transistor of said n-channel transistor pair receives combined
5 and output signals from said first output of said first differential amplifier and said second output
6 of said second differential amplifier.

1 8. (currently amended) The differential amplifier circuit of Claim 7 1, wherein said reference
2 voltage generation circuit is a p-channel differential amplifier circuit further includes a reference
3 voltage generation circuit for providing said reference voltage for said summing circuit.

1 9. (currently amended) The differential amplifier circuit of Claim 8, wherein said reference
2 voltage reference generation circuit receives an active low ENABLE P signal includes a
3 differential amplifier having inputs connected to an output of said differential amplifier.

1 10. (original) The differential amplifier circuit of Claim 1, wherein said first and second
2 differential amplifiers receive an active low ENABLE_N signal.

1 11. (original) The differential amplifier circuit of Claim 10, wherein said summing circuit
2 receives an active low ENABLE_P signal.

1 12. (original) The differential amplifier circuit of Claim 11, wherein said summing circuit
2 includes a clamp device to hold said common output high when said ENABLE_P signal is low.

1 13. (original) The differential amplifier circuit of Claim 1, wherein said first differential
2 amplifier receives a gate control voltage V_{CMN} to control the current through an n-channel
3 transistor within said first differential amplifier in a consistent and predictable manner using a
4 current mirror technique.

1 14. (original) The differential amplifier circuit of Claim 1, wherein said second differential
2 amplifier receives a gate control voltage V_{CMP} to control the current through a p-channel transistor
3 within said second differential amplifier in a consistent and predictable manner using a current
4 mirror technique.

1 15. (original) The differential amplifier circuit of Claim 1, wherein said summing circuit
2 receives a gate control voltage V_{CMN} to control the current through an n-channel transistor within
3 said summing circuit in a consistent and predictable manner using a current mirror technique.